IN THE CLAIMS

A listing of all claims and their current status in accordance with 37 C.F.R. § 1.121(c) is provided below.

1-71. (canceled)

72. (new) A method for measuring blood oxygen saturation comprising:

emitting light from at least one light source; and

detecting a plurality of light spectrums from the light with at least one detector subsequent to the light being scattered by tissue, the plurality of light spectrums including a first light spectrum having a wavelength between 725 and 745 nanometers and a second light spectrum having a wavelength between 880 and 940 nanometers.

73. (new) The method of claim 72, wherein the plurality of light spectrums includes a third light spectrum having a wavelength of approximately 660 nanometers.

74. (new) The method of claim 73, comprising:

detecting the first light spectrum via a first light filter;

detecting the second light spectrum via a second light filter; and

detecting the third light spectrum via a third light filter.

75. (new) The method of claim 74, comprising selecting a pair of light spectrums from the first, second and third light spectrums based on an estimated oxygen saturation value for use in determining a calculated oxygen saturation value.

76. (new) A method for measuring blood oxygen saturation comprising:

emitting light from at least one light source; and

detecting a plurality of light spectrums from the light with at least one detector subsequent to the light being scattered by tissue, the plurality of light spectrums including a first light spectrum having a wavelength range optimized for high oxygen saturation, a second light spectrum having a wavelength range optimized for low oxygen saturation, and a third light spectrum having a wavelength between 800 and 1000 nanometers.

77. (new) The method of claim 76, wherein the wavelength range optimized for high oxygen saturation is from 650 to 670 nanometers.

78. (new) The method of claim 77, wherein the third light spectrum wavelength is approximately 890 nanometers.

79. (new) The method of claim 76, wherein the wavelength range optimized for low oxygen saturation is from 700 to 790 nanometers.

80. (new) The method of claim 76, wherein the wavelength range optimized for low oxygen saturation is from 725 to 745 nanometers.

81. (new) The method of claim 76, wherein the wavelength of the third light spectrum is from 880 to 940 nanometers.

82. (new) The method of claim 76, wherein the third light spectrum wavelength is approximately 900 nanometers.

83. (new) A method for measuring blood oxygen saturation comprising:

emitting light from at least one light source;

detecting a plurality of light spectrums from the light with at least one detector subsequent to the light being scattered by tissue, the plurality of light spectrums including a first light spectrum having a wavelength of approximately 660 nanometers, a second light spectrum having a wavelength of approximately 730 nanometers, and a third light spectrum having a wavelength of approximately 900 nanometers; and

selecting two of the first, second and third light spectrums for use in determining a calculated oxygen saturation value based on an estimated value of oxygen saturation.

84. (new) A method for measuring blood oxygen saturation comprising:

emitting a first light, the first light having a wavelength between 725 and 745 nanometers;

emitting a second light, the second light having a wavelength between 880 and 940 nanometers;

detecting the first light with a detector subsequent to the first light being scattered by tissue; and

detecting the second light with the detector subsequent to the second light being scattered by the tissue.

85. (new) The method of claim 84, comprising:

emitting a third light having a wavelength of approximately 660 nanometers; and

detecting the third light with the detector subsequent to the third light being scattered by the tissue.

86. (new) The method of claim 85, comprising:

emitting the first light from a first light emitting device;

emitting the second light from a second light emitting device; and

emitting the third light from a third light emitting device.

87. (new) The method of claim 84, comprising selectively energizing a pair of emitters from first, second and third light emitting devices to emit the first and second lights based on an estimated oxygen saturation value for use in determining a calculated oxygen saturation value.

88. (new) A method for measuring blood oxygen saturation comprising:

emitting a first light including a first light spectrum having a wavelength range optimized for high oxygen saturation;

emitting a second light including a second light spectrum having a wavelength range optimized for low oxygen saturation;

emitting a third light including a third light spectrum having a wavelength between 800 and 1000 nanometers; and

detecting the first second and third lights with at least one detector subsequent to the light being scattered by tissue.

89. (new) The method of claim 88, wherein the wavelength range optimized for high oxygen saturation is from 650 to 670 nanometers.

90. (new) The method of claim 89, wherein the third light spectrum wavelength is approximately 890 nanometers.

91. (new) The method of claim 88, wherein the wavelength range optimized for low oxygen saturation is from 700 to 790 nanometers.

92. (new) The method of claim 88, wherein the wavelength range optimized for low oxygen saturation is from 725 to 745 nanometers.

93. (new) The method of claim 88, wherein the wavelength of the third light spectrum is from 880 to 940 nanometers.

94. (new) The method of claim 88, wherein the third light spectrum wavelength is approximately 900 nanometers.

95. (new) A method for measuring blood oxygen saturation comprising:

emitting a first light having a wavelength of approximately 660 nanometers;

emitting a second light having a wavelength of approximately 730 nanometers;

emitting a third light having a wavelength of approximately 900 nanometers;

detecting the first light with a detector subsequent to the first light being scattered by tissue;

detecting the second light with the detector subsequent to the second light being scattered by the tissue;

detecting the third light with the detector subsequent to the third light being scattered by the tissue; and

selecting two of the first, second and third lights for use in determining a calculated oxygen saturation value based on an estimated value of oxygen saturation.